Dear John:

Thank you for your note and reprints. The point about lunar albedo had occurred to me, but I was not familiar with your argument about grain sizes. The whole business is, I am afraid, rather amateurish, but I hope less than some of the biological speculations of my physical friends, and someone has to melt the ices.

or near

Is everything on the lunar surface in xx equilibrium with the average solar radiation? I had some hopes for material lodged in deep crevices to furnish more historical information.

Did you have any strong reaction to the proposal for autocatalytic increase in the number of grains (cf. p. 4 enclosed)? We didn't want to elaborate much further on such a whacky scheme, but the speculative basis for an evolutionary development of the grains which might be formulated in rather Darwinian terms was one of the most exciting things we ran into.

I'm off on a trip just preceding the conference the paper is intended for; if you might have any further comment before May 15 could you write me c/o Cowie? (Terr, Magn., Carnegie, Wash.)

I am enclosing a slightly flore finished version, but Cowie hasn't been over it yet. It includes the bibliography you asked about.

Yours sincerely,

## Joshua Lederberg

P.S. Like a great many other people, I'm not a little disturbed about the direction the space program is taking. The Killian report made it rather clear that the military and scientific requirements notwithstanding, that the national objective was to be manned space flight, whether or not this happened to coincide with a balanced appreciation of this particular branch of science in our economy, and regardless of whether this was the most effective approach to the collection of scientific data, etc. Certainly almost all of the biology, e.g. at the forthcoming conference, has to do with putting a man into space; and practically nothing on what useful function he will serve when there, or what he's likely to find. Cowic and I were a little concerned about writing an article that might seem to lend more weight to a helter-skelter program of space research; we hoped this might be balanced by the conservational

What is the Boulder meting?

PKAT/ J